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AMERICAN JOURNAL OF PHOTOGRAPHY

AN ILLUSTRATED MONTHLY
DEVOTED TO PHOTOGRAPHY
IN ITS WIDEST SENSE

Vol. XX


JUNE, 1900

No. 234

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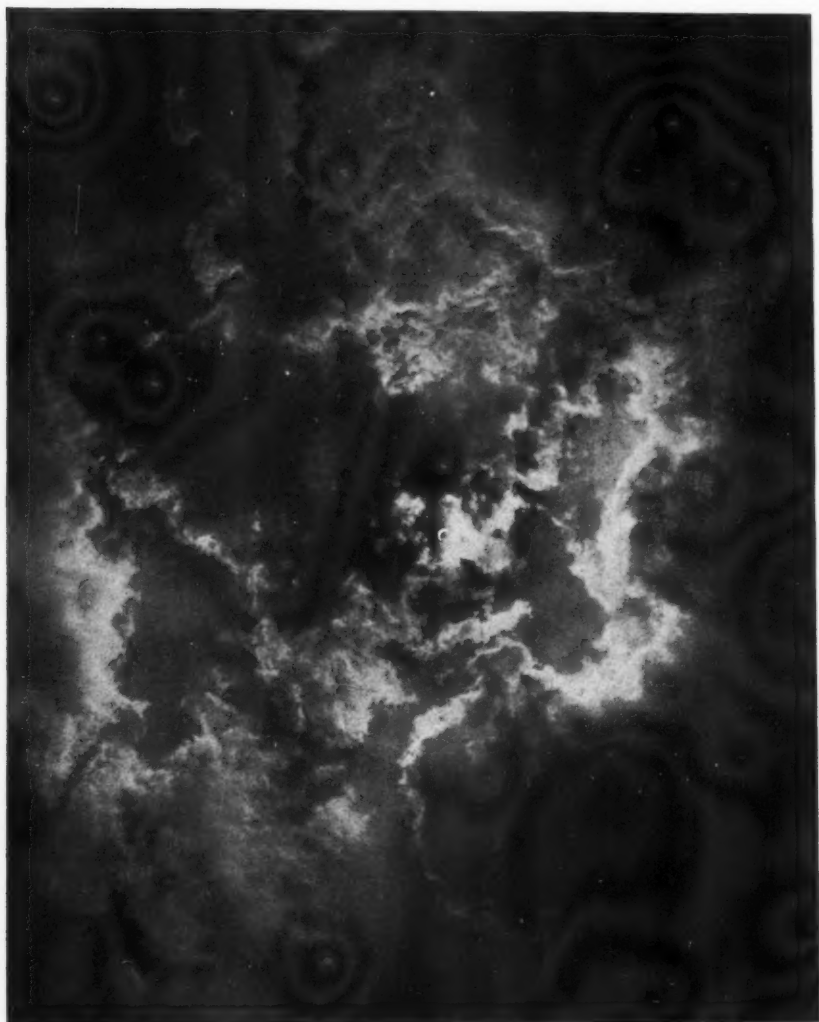


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VOL. XX

JUNE, 1900

No. 234

HERE AND THERE IN LONDON

CARL J. BECKER

MY object is to set before you a few snap-shots made during my different stays in London and vicinity. I shall plunge *in media res*, saving you the rough passage across the Atlantic, thereby preventing the bringing up of many things, and put you right down in the centre of Regent Circus, Oxford Street; not so much to show you some of its very interesting architecture, but bits of actual street life and characteristic pictures of the great city.

Above the din and confusion of the many voiced shouts and cries we are greeted with the stentorian call of the conductors of the unceasing stream of omnibuses, "Bank! bank! all the way to the bank for a penny."

As soon as one of these omnibuses is filled, which in London means when all the seats are taken, place is given to the next.

One does not see our inquisitorial standing or hanging on to the straps. The jolting and swaying from side to side of these ancient vehicles would not permit such a mode of travel. It would necessitate the dumping at the end of the journey a cargo of maimed and crippled passengers at the nearest hospital.

For all this, the London omnibus is a great institution, and affords a cheap method of exploration of the London streets; the stranger is thus enabled, especially when seated on the top next to the side of the driver, to see many a novel and strange sight.

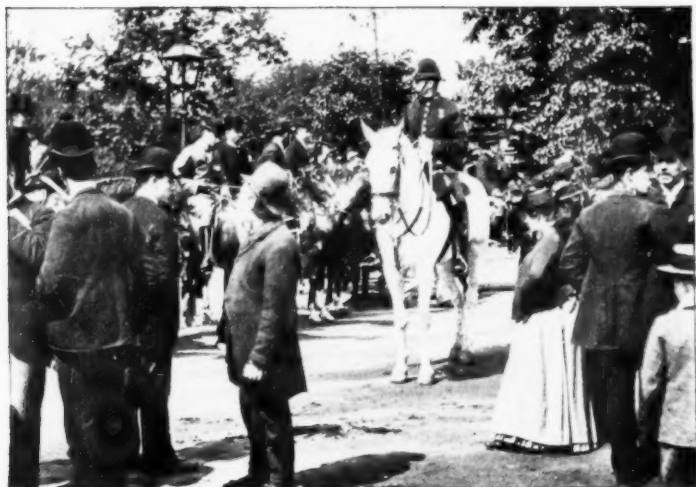
Another great aid to the visitor is the ever courteous and accommodating London Bobby. "Ask a policeman" is an old saying—and if this advice is followed, you will never be lost and will see everything of interest.

Just across the way are busses going west and you are invited to take a ride to the Marble Arch. "All the way to Marble Arch," the limit for the penny ride.

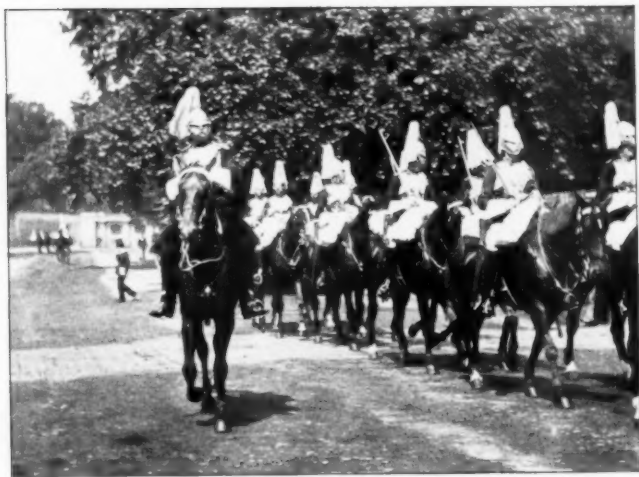
Marble Arch is one of the main entrances to Hyde Park. On the other side of the Park leading into Piccadilly is a very similar entrance called Hyde Park Corner, and it is here commences that greatest and finest bridal path in Europe if not in the whole world. I refer to Rotten Row. During the London season in the forenoon and the latter part of the afternoon equestrians of the rank and wealth of England, Lords and Ladies, Dukes and Marquises, and even royalty in all its degrees, are so plentiful that nothing but the appearance of her Majesty, the Empress Queen or some other great potentate creates any sensation.

Opposite Marble Arch is Edgeware Road, a fine broad street miles in extent leading to the paradise of the English costermonger, where congregate on every legal holiday the lads and the lasses, the "Arries" and the "Arriets." They come a-foot, by train, by tram-cars, by donkey carts, by busses, to Hampstead Heath—"Appy Ampstead."

Besides the general attractions of merry-go-rounds, coconut stands, donkey riding, swinging and rope skipping, my sojourn there was associated with the extra feature of a wild Zulu exhibition. I made no inquiry concerning their diet, but I believe the stringency of the English law precluded the in-



In the Mall, Waiting the Arrival of the Troops CARL J. BECKER



Troops of the First Life Guards CARL J. BECKER



Change of Guards, at Horseguards

CARL J. BECKER



Old Pensioners, Chelsea Hospital

CARL J. BECKER

dulgence of their favorite dish of live babies, and they were obliged to satisfy their hunger with other choice tid-bits. Just now, doubtless, if they had a pull with the Military they might indulge in a dish of well-done or raw Boers.

Returning to the city by underground railway we alight at Charing Cross, and have a look at Trafalgar Square. Here is the famous Nelson Monument on the top of which is a statue of Britain's greatest Admiral. Artesian fountains send forth their crystal streams, and we are greeted everywhere with statues of England's famous warriors on land and sea, Gordon and Peel and the rest of the immortals.

The building on the north side of the Square is the National Gallery. More by good luck than management I was enabled to make a few exposures in some of the rooms.

The love the English working man has for flowers is everywhere apparent. In many windows in the poorest districts even a few flowering plants in wooden boxes remind the possessors that there are brighter scenes outside the smoke-begrimed city.

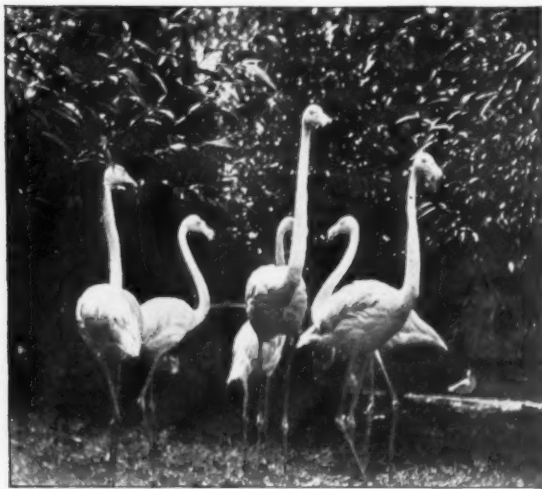
We secured a bit of Covent Garden Market, where the costermongers are seen loading their donkey-carts with their daily supply of flowers and plants which they hawk all over London and the suburbs.

The Guild Hall is a very ancient handsome structure about halfway up Cheapside, accessible by a short narrow passage opening into a small square, one side of which is faced by the historic Town Hall.

It was a great gala-day when I made my snap-shots. The Lord Mayor was going to present the freedom of the city to the Duke of York, the son of the Prince of Wales and the prospective king. The carriage drawn up at the entrance to the hall contained the Prince, accompanied by his son, and nephew, Prince George of Greece.

Not ten minutes walk from the centre of the City of London brings us to the East End and into the notorious White Chapel region. We took a snap at a public or gin palace on the corner of White Chapel Road. In front stood a group of its regular patrons, working men and the roughs and toughs of London. The signs on the window tell the kind of liquor dispensed within.

A portion of Regent Park is devoted to the well known London Zoo. The grounds are laid out in a beautiful and picturesque way. Here may be seen probably the finest collection of animals in the world. I took a number of snaps at the inhabitants. These Flamingoes I caught napping. They are a drowsy sort of biped and the English climate seems to encourage their temperament. To awaken them from their stupor I sprung upon them the latest joke I had brought with me from this side of the water.



Flamingoes—London Zoo

CARL J. BECKER

Shouting "rubber neck," and with my finger on the shutter, I for the instant roused their attention and secured them in an animated pose. Another charming sight is the herd of tame elephants with their howdahs crowded with troops of merry youngsters, led to and fro by their sober keepers, along the fine walks of the garden. Then, too

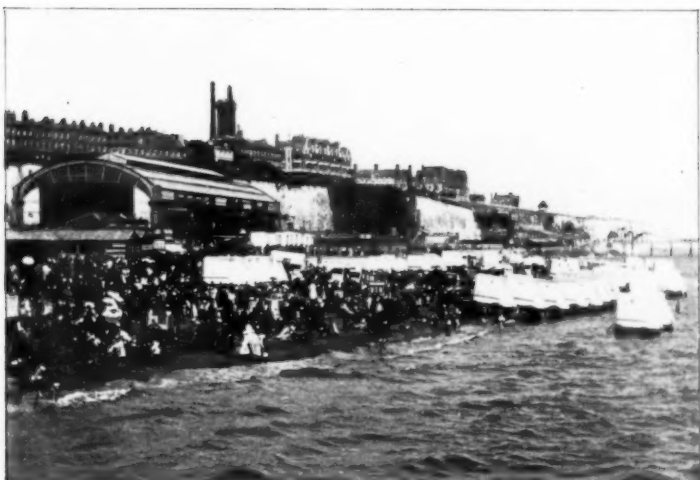
there is Miss Hippopotamus as vain of her beautiful features as the proudest belle of the land, and numerous other distinguished foreign residents.

Back to the city again to see some more of the sights. At all times the English soldier is of interest, but especially now-a-days Tommy Atkins, "Kipling's Absent Minded Beggar," is the hero of the day. Therefore, a few pictures of military subjects might also be of interest here. Some of these I obtained at the ceremony of the Trooping of the Colors, which is annually celebrated on her Majesty's birthday in May.



Negro Minstrels at the Shore

CARL J. BECKER



Ramsgate

CARL J. BECKER

This ceremony, by the by, may take place by royal command, any day between May 20-28th, although I believe the Queen, like all others of her race, was only born once during that week. An interesting sight is a group of spectators watching and waiting for the arrival of the troops, who amid great pomp are going to perform this ceremony in the presence of the royalty and nobility.

The first to arrive is the Life Guards. This is the most magnificent and costly band in the world. All their instruments are of solid silver heavily gilded. The two large kettle drums cost \$5000 each. The bandmen are dressed in rich costumes of purple velvet covered with gold lace. It is truly a magnificent sight to see them riding along on their black chargers.

The Prince of Wales, His Royal Highness, with some members of his staff. He is a Field Marshal and an Admiral of the Fleet, also an honorary Colonel of different regiments of the Guards and Line.

I secured a picture which is of special interest just now—representing Generals of the Staff, where may be seen in the centre Field Marshal Lord Wolsley, on his right Major Gen. Gatacre, sent home from South Africa by Lord Roberts for blundering and causing unnecessary loss of life.

Another picture shows a company of the Cold Stream Guards with their colors raised marching into the Courtyard of St. James' Palace. This fine regiment left many of its officers and men on the Kopjes of South Africa.

A very interesting spectacle is the Relief of the Guard which may be witnessed daily in the Courtyard of St. James' Palace. I took also a snap-shot at a Troop of the First Life Guard, generally known as Horse Guards, on their way to White Hall, the official headquarters of the Commander-in-Chief of the English Army.

Another interesting view is the crowd of sightseers outside the railings of the Courtyard of Whitehall, assembled to witness the relief of the Guard.

Now just a glance at a bit of old Chelsea. This is the great Hospital for old and invalided veterans of England's many wars. Here may be seen the old warriors dressed in long scarlet military frock-coats and caps passing the remainder of

their days in comfort and ease enjoying themselves by smoking and grumbling to their hearts content.

The grounds of the Chelsea Hospital are very extensive and beautifully kept. The last time I visited the place was when Lord Roberts was reviewing the corps of Commissionaries and non-commissioned officers of the Army and Navy, who after long service have formed themselves into a uniformed organization of messengers, care-takers, door-keepers, etc., to fill such posts where men of undoubted honesty and integrity are required.

I shall take you now for a moment to the south coast of England, to give you a glimpse of the doings of the people at an English watering place. Ramsgate is not as large and fashionable a place as Brighton, but it is more typical and less cosmopolitan than the latter place.

We picture for you a group of darkey minstrels who perform several times during the day on the beach. The audience, judging from the pleased expression, is an appreciative one. Ramsgate Town Band, which gives free concerts on the grandstand, is paid by the Municipality. A Punch and Judy show, another attraction and a never ceasing delight to English children, is also a constant feature at the watering place.



See our offer on page 297

PHOTOGRAPHIC SOPHISTICATION

Read at Meeting of Photographic Society, Phila., May 9, by J. Bartlett.

THERE was a time when the veracity of the evidence afforded by the camera was accepted with unqualified acquiescence, but a time followed quickly when confidence in its results as an unfailing index of facts began to suffer by probation, and those who had implicitly believed in its infallibility learned that, like Macbeth's witches, photography could "lie like truth."

The Deus ex Machina often made it become a lying spirit to deceive, so that on occasion it could prevaricate with the aid of certain angle lenses or by elevation or depression of tripod legs.

But it is not our object at present to discuss the ethics of photography, but to show how a qualified deception is often legitimate, nay even expedient from an artistic standpoint of judgment, since the deception, like the cheat of vision in legerdemain, is admitted for the compensation which the deluded sense receives in the pleasure experienced. Hitherto monochrome photography has held whatever art status it possesses by fee simple of its faithful representation of nature in whatever phase she is presented to us by methods peculiar to photography, and not by artistic dodges or devices. Painting has its peculiar legitimate methods, which hitherto have not been considered peculiar or legitimate to photography. Painting justly, because of necessity, has recourse to all sorts of tricks to cheat the imagination to convey through the physical vision to the mental vision the impression of an object or scene in nature.

The faking or dodging which painting must make use of is resorted to not because the painter despises to give an actual transcript of the harmonious coloring of nature, but by reason of the limitation of the means at command. Painting suggests nature and is consistent in her treatment, but in suggesting is often compelled to give a color or a form which is not an actual



Sylvan Solitude—A Sophisticated Photograph JOHN BARTLETT



As Spring Comes On—A Sophisticated Photograph

JOHN BARTLETT

embodiment of the thing itself; a form, we say, because color often deforms objects to human vision, though not to the eye of the camera.

My opinion, perhaps, is not of much weight with the shining lights of the new photography. I have not yet found out how to get ecstatic over photographic symphonies in yellow or nocturnes in blue, but it seems to me that photography is running on crutches when it forsakes its own legitimate methods of monochrome and endeavors to imitate the results of the painter in color. Such photographs look like poor copies of paintings, and despite the ability displayed in composition and conception one grows weary of them.

Photography has "won golden opinions, which should be worn in newest guise, not cast aside so soon."

It is true the photographer's style is simply his way of setting forth his ideas with the camera, and though the rules of art in its application to photography are somewhat restrictive there is scope enough for individual action. Nevertheless there is a tendency nowadays to great laxity in photographic style, and photographers are sometimes rather rash in their attempts at originality of conception and expression, presuming that the correctness or falsity of the idea is dependent upon the power their picture possesses to please some one, asserting that art, like poetry, is addressed to the world at large, not to a special jury of professional masters, declaring that the technical qualities are only means to this public end. To a great extent this is true, and the question, after all, is how far do pictures by brush or camera tend to the object of all the fine arts—enduring pleasure.

The public cares little for method. It is the effect produced which exerts in people this enduring pleasure, and, perhaps, here too the public is right.

The poet is not restricted to measure of a certain kind in giving utterance to his thoughts, and so we are told that one painter lays on the paint so smoothly that not a brush mark is perceptible, while another uses a palette knife, a trowel, or maybe a shovel.

Painting, as everyone well knows, has a tendency to drift away from nature's simplicity, but the like drifting on the part of photography lands the photographer ere long "in shallows

and in misery " until rescued by some considerate friend, who convinces him that he is off his chart.

The tricks of sensationalism, with the gloss of novelty upon them, may pass awhile current for the gold of art. The ruling fad sanctions them, and false taste and prejudiced salon judges



Where Leaps the Speckled Trout—A Sophisticated Photograph J. BARTLETT

demand pictures made by such facile artifices until, by and by, through familiarity with what is false, one gets so perverted in taste and judgment that it becomes impossible to distinguish or appreciate the beautiful and true, when some daring spirit, braving the turn-downs of the jury, has courage to offer some-

thing natural and withal lovely. We, viewing it through the diffracting medium of a set standard of fashion, adjudge it entirely too commonplace or ordinary in motive or treatment.

Sensationalism has always been considered a step downward, since it tempts by its very demands to dash and coarseness of execution, to carelessness of manipulation and disregard of technical qualities, as well as to the assumption of the various forms of mere studied effectism. Then, in turn, it tends to selection of subjects either vulgar or profane in the sense of disregard of the true aim and province of photographic art. When photography undertakes to present on the walls of our photographic salons the agony of Golgotha and has a yellow baize exhibition space all to itself and a set of councillors skilled in art puffery to glorify its merits in our photographic magazines photography has certainly reached a dangerous pinnacle of sensationalism.

It is by this adulation of quondam friends, as well as by the ability displayed by the photographer in the production of such pictures as the Dead Christ, the Crown of Thorns, the Seven Last Words, or the Crucifixion, that the danger to photographic art is increased. As Charles Lamb says: "Instead of realizing an exalted idea we have only materialized and brought down a lovely vision or a sublime feeling to the low standard of the flesh."

But, my friends, I am afraid that I am like Josh Billings, who announced a lecture on milk, yet made none other allusion to the lacteal fluid save in the announcement. But this is my infirmity. My topic is photographic sophistication, and as sophistication might be defined as that which gives the impression of truth and realness by means of what is false and unreal, I shall endeavor to show by a few photographic illustrations on the screen that such a method of sophistication might be accounted as legitimate in accordance with the dictum of the modern school. In other words, I have made the camera become a lying spirit to deceive and have sought to cheat the sense of vision by presentation of apparent natural landscape views in which the natural objects of landscape have no lot or portion.

I claim, if faking of negative and print is admissible to produce the so-called pleasurable effect, why not faking of the

original scene itself? I have got me together a few incongruous things—a bar of soap, some old corks, coal ashes, pieces of cinder, old rags, a few twigs, stones and moss, clippings of celluloid film—in fact any old thing, and have endeavored to build up with them the simulation of a landscape picture.

The endeavor was begun in a mere spirit of mischief—as a sort of burlesque show on legitimate art photography—but I builded better than I knew, and the result demonstrated that this method of pictorial effect (not necessarily confining oneself to the incongruous) in the hands of some one possessed of more artistic perception might result in “something far more rare and strange.”

The amount of personal amusement, not to say actual enjoyment derived from the exercise of the faculty, would more than compensate for the pains bestowed in the creation. The few slides I shall show should not be judged too severely artistically, since I have revealed the *modus operandi* of their evolution.

PHOTOGRAPHING MONUMENTS

ANDREW ROBERTSON, A. M.

THE beauty of all objects, whether natural or artificial, and the pleasure they afford to the imagination, is increased or diminished according to the circumstances under which they are seen and the manner in which they are viewed.

Before entering into a consideration how far monuments, whether architectural or sculptural, are affected by these circumstances, it seems expedient, in the first place, to consider certain facts and principles which are found to pervade all nature, according to the experience of artists, who are the most acute observers of the appearance of nature and of the changes produced by circumstances.

It is proposed here to consider visible objects in reference

only to their form, comprehending landscape, architecture and sculpture. The effect of light and shade upon them will also be considered, whether produced by the sun or external objects or by daylight admitted through windows into interiors. Color, as far as photography is concerned, forms no part of the present inquiry, monuments being of one color or nearly of one color.

The worst view of a landscape is a perpendicular or bird's-eye view, a representation of which would be little more than a map. Artists, therefore, never make choice of a view which partakes in any degree of this character.

The next worst view is one that is horizontal, for if it be a flat surface, whether it be water, sand or earth, it presents only a simple horizontal line, especially if the eye be placed on a level with the plain. And if anything happen to grow upon it, even grass, the view of everything beyond it will be interrupted, even by grass. The best view of such a landscape is one that is more or less diagonal, taken from a greater or less elevation from that of the eye when standing up or sitting down to any higher degree of elevation that good taste may select.

In the former case little more is seen than the nearest or foreground objects. The distance, if seen, is still a horizontal line; but if a rising ground or hill is to be represented we have a diagonal view of its surface, which is the best to display whatever objects it may contain. Besides what regards the degree of elevation there is an infinite variety of points or directions all around the spot from which the view may be taken, as well as within its circumference, from each of which different objects or combinations of objects would become the foreground or principal features of the view.

Amidst all this infinite variety it is found that artists usually make choice of the same view. This is generally the case also in portrait painting, and tends to confirm the fact or principle here asserted that some views of every object are by common consent considered beautiful and afford more pleasure to the imagination than others. The question of light and shade will be considered further on.

It is essential, therefore, that public monuments should be so placed that they may be seen to advantage to display their

beauties and hide their defects, if chance there should be any. To use a hackneyed expression the monument should "put its best foot forward."

In architecture the worst view of any building, next to a bird's-eye view, is directly in front of its facade, whether of its principal flank or back fronts. The best view is facing one of its corners at a moderate distance. This is the point of view invariably selected by painters, more or less inclining to one or other of its fronts, probably for the following reasons. In architecture there is of necessity a repetition of corresponding parts, forms and quantities, which contend with each other for pre-eminence and distract the attention. It is therefore found necessary in making a design for a building to separate these contending parts or wings by placing a mediator between them—a portico, tower or other commanding feature sufficiently powerful to bring the whole into subjection, for in a building subordination is as essential to good order as in a state. Still, the wings are jealous of each other until one is rendered subservient to the other by being viewed diagonally or in perspective, whereby the apparent dimensions or quantity of the one is increased and of the other diminished. But if local circumstances happen not to admit of a perspective view the only remedy is to increase the quantity of the intermediate feature, thereby diminishing the importance of the contest between the wings. It is here that an architect has most scope to display his judgment and taste in accommodating his design to the locality prescribed and to other circumstances rather than in the selection of the parts, which generally consist only of well-known and approved forms, or otherwise they are generally found to be only a congregation of novelties, or rather conceits, a thousand times invented before and as often discarded.

But our object is not criticism of architecture, but to prove that some views of every edifice or public monument are more beautiful than others. And for this purpose it may be sufficient to say that if any number of photographic artists be employed to take one, and only one, view of a building, they would all select nearly the same point of view, judging more from a refined feeling than from investigation why that view must be the best.

As the sun moves round in his course every variety of effect is produced, but when once permanently deposited in the interior of a building monumental sculpture is subject to little or no variety of effect. The importance of selecting a judicious arrangement of light and shade is, therefore, manifest; yet how rarely do we meet with any corresponding result. On the contrary, from not adverting to these circumstances, this arrangement is generally so injudicious as greatly to diminish and often altogether annihilate its beauty.

Surrounded by numerous conflicting reflected, borrowed or side lights, sculpture, however fine in itself, becomes little better than an unmeaning, shapeless mass of marble, clay or plaster. If it be a work of acknowledged excellence no person who has any regard for his character as a man of taste dares confess that he does not see its beauty.

Few have courage to be honest in matters of taste. If admiration be not felt it is easily affected. He may safely decant upon the exquisite beauty of the antique without much fear of contradiction and condemn all modern productions. Hence, therefore, the strange inconsistencies and vapid generalities by which true taste is often confounded and silenced. But the photographer who is compelled to take the monument under conditions of bad illumination has no such recourse. His view comes in for a full blast of condemnation and he is blamed for want of taste. But we hope he may benefit from our hints and come to know or take the trouble to study and feel the beauties of sculpture under favorable conditions of illumination.

I remember a case in point. The wonderful statue of Illyssus in the Elgin room of the British Museum was at one time placed in a very unfavorable light and thereby made lifeless in effect, indeed insipid. A person enthused with affected admiration of the antique might have gone off in raptures over its beauties, but the matter-of-fact but truthful observer would have pronounced it a very inferior work of art—not worthy of so much commendation. Not far from the museum, in a drawing academy, I saw a mere plaster cast of the Illyssus from the original, but the master of the studio had placed it in such a position as regards illumination that one possessed even of moderate taste for the beauties of Greek sculpture would have

perceived the vigor of effect, the exquisite form and character which were thus developed merely by the light and shade called forth by proper arrangement. It shows how much the perception and enjoyment of the beauty of sculpture depends upon circumstances under which it is viewed. Anyone may be convinced of this by purchasing and removing from the shop of the dealer in plaster casts a bust or figure and placing it in his own room under proper conditions of illumination. Where it has been huddled together with a promiscuous assemblage of figures without adequate means of artistic lighting it was wholly incapable of producing any pleasing effect, but in his own studio, though only plaster and the work of a mechanic, it may inspire him with poetic enthusiasm. Everything depends thus on light and shade; and the commonest object may be transformed into something beautiful.

The powerful effect of light and shade and the tender development of the delicacies of form by gradations of middle tint leave the photographer nothing more to do than to take just what he sees before him.

In many of our stately mansions where one is called to photograph the salons one often laments the lack of taste or want of judgment displayed in arrangement and illumination of sculpture, for often they are mere articles of furniture, placed with a view to the symmetry of the room and without any regard to the effect of light and shade. If their beauty and expression be not displayed all that can be seen is so much marble, representing the expenditure of so much wealth for mere ostentation. An inferior work of art would artistically answer the purpose as furniture equally as well.

If sculpture be not properly lighted, in such a manner as to draw forth its beauty, that which is of a superior class, the antique and the finest examples of modern art, seem to the public eye little better than that of a more common description. But when properly lighted the exquisite superiority of the former becomes manifest to all. Just as in music, the finest old Cremona, worth a thousand dollars or more, in the hands of a common performer seems no better than a fifty-cent fiddle. But let an able master of the instrument only draw his bow across the strings; the difference will be perceived immediately by the most uncultivated ear which has natural perceptions.

A POEM ON THE CAMERA

(1720.)

THE following Latin poem on the camera was composed by Vincent Bourne in the year 1720. Though but little known to fame he seems to have been a very clever man and his writings were highly praised by Cowper, who ranks him for Latinity on a level with Ovid, taking the trouble to translate twenty or more of his productions into English verse. What made Vincent Bourne so averse to expressing his ideas in English it is hard to say, but with all due deference to the taste of Cowper one must admit that his poetry will hardly rank with that of the Augustian age of Roman literature. The Latin poem on the camera, however, will be of some interest to photographers nowadays, when re-read by the light of modern discovery.

Unfortunately, Cowper was not an amateur photographer, and so did not include this poem amongst those he selected to put into English. Our readers will have to be satisfied with a less poetic treatment of the subject:

CAMERA OBSCURA.

Nocturnum Zeuxem, variae subtemina lucis,
 Et picturatam sine succo et arundine chartam,
 Phœbe, canas, lucis deus idem et carminis idem.
 Ergo age, quæ Borean a fronte exceptet, opacam
 Constituas Cameram: valvas utrinque fenestræ
 Obde prius, nullamque sinas in parite rimam
 Hiscere, per tenues ne lux ingressa meatus
 Confundat teneras species, formasque caducas.
 Exiguum tamen in valvis pertunde foramen,
 Qua radii introeant, lævique huic insere vitro
 Tornatam, modicoque rotundam gibbere lentem;
 Et pone albertem digito suspende tabellam. ETC.

TRANSLATION.

Sing! O God of light, almighty Zeus! O Phœbus sing! Sing
 of the varied shapes of light painted upon canvas without pig-

ment or brush. Come, now, place your dark camera to intercept the north wind in front. First close up the shutter and let there be no crack in the wall wherein the light by subtle wanderings may get within and mar the graceful sights and fleeting forms.

But let there be a little aperture in the shutter by which the rays of light may enter through the glass lens, turned and rounded with a proper convexity, and behind suspend a white tablet. Through the entrance will come in of their own accord, and in a moment of time, the forms of things, and on the canvas you will see the figures flying around in proper motion of their own free will.

If there is in the doctrine of Epicurus any trust, these parts leave the bodies perceptibly and bear themselves upon the plate voluntarily to the eyes of the spectator. Now, with what power does the lens refract the entering rays of light? According to what law does it unite or embrace the wandering rays? How does it tie them in a knot and bring them to a focus, turning the bottom to the top? Why does the picture love the prison-house of darkness? Let the naturalist set forth, for it is not given to poets to know everything. This alone it is sufficient to know, that nature does not like them to bother with what is of no use.

Therefore, come! Join me in considering rather what is evident to the senses, and do not seek out the hidden causes of things.

Behold the blank surface at first clothed only in whiteness; now colored with the varied hues of the rainbow, displaying the varying magnificence, proud of its new dress of luxuriance.

You perceive how like a full-grown plant it begins to blossom, but without any cultivation.

Already, like a magician, it pours forth of its own free will flowers brilliant and full of beauty. Anon you behold towers of diminutive size and miniature representations of lofty buildings, but inverted, hanging from the top of the picture with spires pointing downward. The sky rests upon the bottom of the picture, while the ground is at the top. Everything is topsy turvy.

Just as the ignorant used to think that the soles of our antipodes pointed upward, clinging to the overhanging earth,

wondering by what means they held on and why they were not precipitated headlong in the skyey abyss, striking against the underlying stars.

Here, indeed, you behold a picture which Apelles himself dared not to paint. Like the growing grain undulating with the breeze with waves frolic with playful motion, so now appear upon the screen comical human figures, counterfeiting flitting images of wild beasts eagerly hastening to the call of their fellows, born in an instant and moving off the scene, seeming to breathe and wondering at the new creation.

And now, should chance bring a cavalier into your sight, you wantonly arrest his progress and compel him to step into your tavern. And yet you would not hinder his journey nor cause delay. At this point the gods permit that one's greedy eyes be struck with astonishment and that (without violating modesty) one gets a glimpse of a maid standing on her head. How gracefully her limbs curve! How the folds of the bottom of her skirts are finally gathered into a neat little circle, which a maker of gowns could girdle with half an arm! Moreover in this, also, the picture is just like a real girl, for, as if afraid to be touched, it adroitly and with exultant smile escapes the grasping arms of the lover and mockingly eludes him.

But enough. Open the room and let in the light. The canvas returns to its wonted whiteness and puts off its ever changing brightness and its pride, vaunting on account of the possession of such a medley of pictures. Its glory slips away and dissolves into thin air. Although the light illumines everything, it darkens our picture and becomes of no use through too general use. Thus at times the shades of the departed in the translucent shadows of the night are wont to hold their dances, and, as a poor light, the common people hold their dance in a small circle. Presently the rising sun puts to flight the pale shades and the dissolving shadows disappear into their accustomed region of the night.



See our offer on page 297

PORTRAITURE OUTDOORS

A. P. SARGEANT

THE excellent illustrations accompanying the paper on Portraiture Without a Studio, by William Innes, published in the last number of the AMERICAN JOURNAL OF PHOTOGRAPHY, have induced me to present a few examples of outdoor portraits on a subject which the writer of the paper only incidentally touches upon.

It has been said that a good portrait may be made anywhere provided the photographer knows what a good and true portrait is. One is hardly prepared to admit so much, but the truth is, if the photographer cannot tell whether the lighting of the face is beautiful, whether the distribution of the light and shade is harmonious when looking directly at the subject, all the directions or studio rules for effective illumination will be of little worth. He must know "where beauty is, see where it lies," else he may take the worst for the best, or if he secure something beautiful it is the result of a lucky chance. He may get his picture in the salon and "win golden opinions," but it is as Mr. Swift has remarked a mere "chance picture," and he has no right or title to the credit for artistic ability.

The judgment as regards beautiful illumination may be cultivated by study of engravings of works of celebrated painters. The Perry penny pictures make it possible for everyone to get a collection of excellent examples of portraiture by the masters, and the endeavor should be to secure similar lightings of the face.

Very many of these illuminations are possible out of doors; even the Rembrandt effect; that is the real Rembrandt. Outdoor portraiture really gives a more natural effect than the stereotyped studio kind.

By the aid of any sort of screens and a few props the light may be modified to suit the taste, and by choosing the proper time of day for exposure good results are attainable.

The early morning hours or the evening twilight, or rather shortly before sundown, are the only periods of the day suitable for outdoor portraiture. Some recommend an overcast day, but I think the illumination is too uniform at such a time. The sun ought to be somewhere in the heavens, though never where it shines directly on your improvised outdoor studio. The shadows at such a time are rich and brilliant, the half tones fuller and the high lights more expressive, giving the countenance a more pleasing expression.

It does not matter much in which direction the dominant light comes—north, east, south or west—but there ought to be a very small area of very bright illumination on the forehead, and this secured the half tones, the shadows and the small area of intense shadow will evolve themselves.

It is rather difficult to give directions for illuminating the head. I suppose a modeler of a clay bust would find it somewhat difficult to tell the beginner in sculpture how he applied the clay to produce a peculiar effect. The only direction that can be given is to shift the curtains, alter the size of the opening of the top light screen and shift the position of your sitter until you hit upon some good effect, then make the exposure.

I am not much of an advocate for reflectors for the shadow side of the face, since the injudicious use of them destroys all texture in the shadows. Still I would not say always dispense with them. They may be absolutely necessary at times to give translucency to the shadow. The tendency is to place them too near the face, and thus give a chalky effect in the picture.

USE OF MIRRORS IN PHOTOGRAPHY

THE *British Journal* for March 23 has an excellent paper on the "Use of Mirrors in Photography." The writer says:

To the great body of amateur workers the use of mirrors in photography may be said to be unknown, and, doubtless, the cost of a really perfect mirror, as supplied for high-class process work, would deter many from adopting them in their work.

This latter objection, however, need not prevent any enthusiast from undertaking much interesting work, even among the class of subjects, such as clouds and floral photography, previously referred to, for a serviceable mirror may be made by any one without incurring much expense, after the following plan:

In providing a mirror, it stands to reason the surface of the glass employed must not only be free from flaws, but likewise, if perfect definition is to be acquired in photographing by its means, its surface must be absolutely flat. To obtain this there is no necessity for any one who merely intends experimenting in such as cloud photography and on other subjects where extreme fineness of definition is not required, going to the expense of having a large sheet of glass specially ground and polished, for in most households or second-hand furniture shops an old mirror can generally be found, the surface of which is quite true enough and free from flaws, which, on removing the silver compound from the back by means of dilute citric acid and a coarse or woolen cloth, will permit of its being converted into a very serviceable black mirror. To do which, on the back surface being rendered free from any silver deposit, let it be carefully coated with Bates's black varnish or a good sample of Brunswick black, which will produce a very serviceable article.

In using mirrors of this description, unlike those in which the back is coated with silver, the active reflection would appear to be from the front surface of the glass only, the light on passing through to the back becoming absorbed by the dark pigment, so that there is no trouble as a rule from double images when such mirrors are employed. The exposure to a sensitive plate, when some subjects of a non-actinic color are being photographed, may require to be considerably longer with a black mirror than would be the case with an ordinary silver mirror, but the most perfect definition is capable of attainment. When dealing, however, with light objects, such as clouds, etc., the exposure, even with the black mirror, becomes very rapid.

Flower studies in every variety of color are most beautifully rendered, and to those who have never experimented in this special branch of photography there lies a wide field for delightful occupation and study.

CAMERA AND BRUSH

IT must be admitted that what we all, artists of the brush and of the camera, endeavor to obtain is truth in its most pleasing form.

The beauty of an artist's product is in its lack of ugly detail, or only such detail as is needed to carry out the motive, the proper handling of values and accentuation of the most pleasing feature. These properties will give fine results, although all effects from the brush must necessarily be somewhat out of drawing, even in the hands of the best workers, compared to a photograph. There is where the artist wanders from the truth, but it is counterbalanced to a great extent by proper handling of the aforesaid properties.

Comparing the artist with the photographer, both men of course understanding their arts, you find the photographer understands the necessity of proper tones, composition; but is hampered in a great many cases by a quantity of detail he doesn't want, and always by improper rendering of tones. It is toward the manufacturer we look for relief on this last point, although they have made great strides in the last few years, for which we are duly thankful.

I think the photograph is often underrated, for the very reason that it is such a great advance that critics do not realize the possibilities; and I want to say right here that pictorial photography is in its infancy, as is plainly shown by the effects we see daily. They are so frequently attempted by persons who have apparently little knowledge of composition, and at times poor technique, that it seems to have led some to suppose that the limit had been reached. There was an article in the AMERICAN JOURNAL OF PHOTOGRAPHY of January from the *British Journal of Photography* in which the writer criticises an article of Mr. Steiglitz. The criticisms were mainly just, but in the latter part of his article his comparisons were

rather amusing than otherwise. He says "the simplicity of the artist's tools leaves an inevitably larger place for the exercise of deft manipulative skill. The essentials that form the creation of the world, or at least that point in the history of the world at which they become recognizable quantities, the first sketch of the mammoth on his horn by the hunter who had killed him may have commanded, and justly, the highest place and deference. That this instinctive paying of respect is a true one and capable of very much wider application may be argued from the superior place universally given to a 'hand-made' article over the 'machine-made' one—at bottom a tribute to what best deserves honor—active brain power."

Simplicity is very desirable as long as the simplicity is combined with efficiency, but no longer. It is not merely the simplicity of the artist's tools, but their adaptability as well. The Indian's bow and arrow is a model of simplicity, but hardly to be compared with our modern arms.

Brains, of course, is a necessity to all good work, but if brains and skill do not use the proper tools the result will not be as near perfection. In other words the artist's tools are to a degree crude, and I don't believe the pinnacle of art will ever be reached through the means that they employ.

His characterizing the artist's product as a "hand-made" article and the photographer's as a "machine-made" article made me wonder if he still wore the old home-spun clothing instead of the exquisitely "machine" woven goods.

In regard to freak photography I would say that it is merely a fad and efforts wrongly directed. It plainly shows weakness, a trespass on the artist's territory, a lack of faith in one's self, and small knowledge of the possibilities of the means employed, raising a false standard of art, and can only properly be called a fad pure and simple.

T. LLOYD WHITE,
Washington, D. C.



See our offer on page 297

PLAIN SALTED PRINTING PAPERS—THEIR TREATMENT AND PERMANENCY

A. T. NEWTON

THERE is little doubt but some of the most exquisite results in photographic printing that have ever been obtained have been produced by means of rough-surfaced drawing paper, salted, and finally sensitized by means of ammonia nitrate of silver, and, were it not for the widely accepted belief that these samples of printing paper lacked one of the chief essentials in photography, viz., permanency, there is no question but they would be in much greater request at the present day than is the case.

The question of permanency in the results obtained by the use of these papers when silver is employed as the sensitizing agent is, no doubt, to a very large extent dependent upon the treatment those printing papers receive at the hands of photographers, both in the preparation of the paper and also in the after-treatment of them when the printing stage is reached, and any one preparing and using these papers for the first time ought to understand that in several respects their manipulation will require to be differently conducted from that ordinarily bestowed upon the smoother classes of printing papers so much in use at the present time.

Many years ago the writer gave a considerable amount of thought and attention to the preparation and after-treatment of both thick rough and thin smooth samples of plain salted paper, and the results now seen after a considerable lapse of time are highly instructive, and go far to demonstrate that lack of permanency is traceable in a great measure to the faulty treatment of these papers.

In the preparation of rough-surface drawing papers for

photographic purposes a beginner will be struck with the apparently extreme ease and simplicity of the various manipulations required in their production, for it is quite within the scope of any lady or gentleman who may feel inclined to bestow a little thought upon the operation.

Hand-made samples of drawing paper of almost any degree of texture are readily obtainable from any respectable stationer or artists' color man, and of the various brands perhaps there is none more reliable than those of Whatman's manufacture, any size sheet or portion of which can be salted and sensitized as occasion requires, for a period of about half an hour's time is sufficient, not only to salt, but likewise to sensitize and dry a sheet or so in perfect condition for the printing frame.

In the operation of salting the writer has no hesitation in giving it as his opinion that many of the hints published from time to time regarding the best means of performing this operation are, to a beginner, misleading, or at least do not convey information that is most likely to lead to ultimate success. For instance, in very many cases where instruction is given how to prepare a salting solution for rough-surface papers, gelatine is recommended as the proper medium to employ in combination with chloride of ammonium or sodium. The writer is far from wishing it to be understood that gelatine is not suitable for the purpose. In the hands of experienced parties it has been employed from the earliest days in photographic printing; but the chances are about ten to one against a novice who for the first time essays to sensitize a sheet of paper being able to salt his paper satisfactorily when gelatine has been used. A far better medium is found in arrowroot worked up into a very thin paste or mucilage.

And here let it be noted that different samples of paper require varying strengths of salting solution. In the early days of silver printing the preparation of the paper previous to the silvering was considered a separate branch of photography, for the work of the printer was understood to begin with silvering the paper, and it was only by the experience he possessed in dealing with one and the same brand of salted or albumenized paper that he was enabled to arrive at the best strength of silvering solution to employ for the particular class of paper being used, and it was no uncommon event for an experienced printer

to find out that one brand of paper, owing to some property it possessed, would give beautiful results when silvered after a formula that would yield nothing but failure under different circumstances. Therefore, when dealing with these papers, a beginner ought never to adopt some particular formulæ that he or she sees heralded forth as most suitable, and rigidly stick to it, expecting it to work equally well in every case; rather should they study closely the behavior of a particular quality of paper when treated with a well-conceived formula of salting and silvering, and, when they have arrived at the best results, to note carefully how these results were obtained and follow such in their after-working.

One of the objects of employing such organic substances as gelatine, starch, arrowroot or tapioca is with the view of filling up the pores of the paper so as to retain the printable image as much as possible upon its surface, thereby giving the picture the utmost amount of brilliancy and vigor, and this function of whatever organic substance be employed, in conjunction with the chloride used, should be kept in view by whoever is undertaking the operation; and the mode of applying it to the paper, as well as the proper consistency of the chlorine solution used, should receive careful consideration.

In the case of gelatine, when used as an organic substance in conjunction with chloride of ammonium, it is not infrequently recommended that, after a salting solution is prepared by thoroughly dissolving a quantity of gelatine in the proportion of ten to twelve grains per ounce of water along with about sixty grains of chloride of ammonia, that the paper should be *immersed* in this solution. This treatment, however, is far more liable to yield poor results than when it is merely applied to the surface only of the paper by floating or swabbing. The latter, however, requires some practice to enable any one equally distributing the salting solution over the entire surface of the paper, and here we have just another instance in photography where an operation is lightly passed over with the briefest possible description that ought to be most fully explained, so that any novice could be guided to do the operation successfully.

The coating evenly of an entire surface of a small sheet of paper is by no means so easy as many imagine, and if the gel-

atine solution is not kept at the proper temperature during the operation uneven sensitizing will be the result. Floating, again, requires practice to avoid air bells, etc. If, however, swabbing be decided upon, then let a good flat swab be made by taking a sufficiency of flannelette to form three thicknesses of the material, and having provided a long strip of glass about four inches wide lay the flannelette over the end of the same so as to allow of about one inch of cloth to act as a swab. This is far and away the best tool to employ for the purpose; any one can make it for themselves, and it will work better than any camel's-hair brush ever did for this purpose. In doing this the paper should be laid flat on any convenient support, and a large sheet of clean white paper placed underneath, that, being coated, will prove cleanly and useful.

When evenly coated the sheets are pinned up by one corner to dry in close proximity to a moderately hot fire. A few minutes of time will suffice for drying, and when so will keep indefinitely. A cross mark being applied on the wrong side will help to satisfy the operator which is the correct side to sensitize when the silvering stage is reached.

Some of the finest prints the writer has ever seen on plain salted paper have been produced with a salting solution made with arrowroot and chloride of sodium. The latter, in its proper proportion, when quite dried in a clean porcelain saucer, is dissolved in clean water, and the latter is boiled in an enamelled saucepan. A sufficiency of arrowroot is then mixed in a clean basin to form (when the boiling water is added) a very thin paste of about the consistency of cream. This, when nearly cold, is swabbed over the surface of the paper in exactly the same manner as described above. Some writers advocate the immersion of the paper, but this is apt to yield a sunken appearance to the prints, the final sensitizing with silver not being kept sufficiently on the surface.

With ammonia nitrate of silver the solution is likewise applied by means of the glass and flannelette swab, one being provided for each purpose.

To make the sensitizing solution, strong liquor ammoniæ is added to a solution of nitrate of silver (say of a strength of about sixty grains per ounce) until the dark brown precipitate formed is redissolved and the solution turns water white again.

Half of the quantity thus made is taken in a clean glass measure and made just acid with a drop of pure nitric acid. This is then added to the other portion, and, when filtered, will form an efficient sensitizing solution for some salting formulae and brands of paper.

In applying this solution the paper ought to receive at least two coatings. After the first has been applied the paper is dried near a bright or brisk fire. It is then allowed to get quite cold, when another coating of silver solution is applied, then dried again, and is ready for the printing frame. Paper prepared in this manner will not keep in good condition for any length of time, but as the sensitizing is so easily and rapidly performed there is no need to keep a supply ready sensitized.

Printing is conducted in exactly the same way as other samples of printing papers, but it is when we come to the toning and fixing stages that special precautions require to be observed, so that permanency in the resulting pictures may be obtained.

One of the first essentials towards permanency will be found in the *almost* complete removal of the free silver from the paper prior to the operation of toning, and this must be strictly attended to both when dealing with thin as well as thick samples of paper, for every fibre of the paper must be thoroughly reached with the washing water before toning be attempted. Several changes of washing water will be required before this will be effected, and if it is inadequately performed it is easy to see what mischief will result.

When the paper received its coating of ammonia nitrate of silver, by reaction with the salting material employed, chloride and organic salts of silver were formed in and on the surface of the paper, both of which are necessary; but, in addition, there is always more or less free silver present. Now, if this latter is only affected by a mere slight operation of washing prior to toning, the soluble silver becomes, as it were, diluted, and in such a condition is very liable to soak into the paper instead of being retained on the surface, and if this happens not only will the operation of toning be interfered with to a certain extent, but when the fixing operation is reached the imperfectly washed print is sure to give trouble by reason of the available silver in the print becoming converted into hypo-

sulphite of silver, which, in its turn, must be dissolved in an excess of hyposulphite of soda.

As a further precaution, all samples of these papers ought to receive special treatment between the operations of toning and fixing. This means subjecting the toned prints to an immersion for ten to fifteen minutes in a fairly strong bath of salt and water, from which they are removed to the fixing bath.

It follows, therefore, that plenty of water must be applied to remove *nearly all* the free silver prior to toning, and that the most thorough fixation should be given; and, if this be carefully seen to, the image on these papers will be as permanent as those of any others having silver as their base.

When the washing and fixing has to be so thoroughly performed the printing must be carried deeper than with other samples of paper, and perhaps there is no more suitable toning formula than acetate of soda and gold, the function of which is to attack the light-changed image of silver and nothing else, so that there ought to be little or no free silver present to interfere with the action of the toning bath.

Another method of toning these papers has been recommended, viz., by chloro-platinite of potassium, which can be obtained in small quantities from the Platinotype Company. By means of this pure sepia tones can be obtained as well as black tones by merely altering the strength of the toning bath, but when properly treated these papers can be made to yield with gold and acetate of soda almost any tone that may be desired from reddish-brown to purple-black, whilst on the much-abused score of permanency there need be no fear.—*British Journal of Photography.*



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SCIENTIFIC NOTES

Metol-hydroquinone.—H. Quatz, writing in the *Atelier des Photographes*, recommends the following formula, which, subject to various modifications, may be taken as a stock solution for many kinds of development :

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Metol.....	5 grammes.
Hydroquinone.....	1 gramme.
Bromide of potassium (10 per cent. solution).....	60 drops.
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No. 2.

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development with ferrous oxalate its action is the opposite, being in that case an accelerator and producer of fog. For instantaneous exposures, take 3 parts of No. 1 and one part of No. 2. For time exposures, or where over-exposure is suspected, begin with a small quantity of alkali, say 10 parts of No. 1 to 1 part of No. 2, increasing the latter as may be thought desirable. Development begins at once in the case of instantaneous exposures, and it is complete in two or three minutes. Several plates may be developed in succession in the same solution, which does not lose its activity. A mixture of old and new developer may be used with much advantage for time exposures. The developer may also be used for Velox paper. For the carbon variety use three parts of No. 1 and 1 part of No. 2, and for special portrait add an equal quantity of water. In the latter case development is slower, and the pictures show more contrast than with the developer recommended by the makers of the paper. For bromide paper, take three parts of No. 1 and 1 part of No. 2, and dilute with five times the quantity of water. Lantern plates may be developed with 6 parts of No. 1, 1 part of No. 2, and 7 parts of water. The tone may be modified by varying the strength of the developer. Black tones may be secured with a concentrated developer, whilst the addition of water tends to warm brown tones.—*British Journal*.

Dr. Liesegang, in a communication to *Physicalische Zeitschrift*, makes known the fact that a mixture of equal parts hydroquinone and anhydrous carbonate of soda rubbed to a thin paste with alcohol is sensitive to heat rays, turning in the course of a few minutes to an intense blue color. He brushes the mixture on thin writing paper and exposes the sheet to heat in a gas oven. Bleaching is effected in five seconds. By placing coins upon the paper images of their shadows may be secured.

Herr Goedeke in repeating the experiment finds that the intense blue compound may also be prepared, by rubbing the hydroquinone and calcined potassa together in the dry state.

This dry mixture turns green on exposure to radiant heat, and images of silver coins may be produced upon the paper.

Herr Watzek recommends the preliminary sizing of the

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paper used for the gum-bichromate process. He employs chrome gelatine in preference to plain gelatine, and thereby secures clearer high lights in the print.

A five per cent. solution of chrome alum is added to a five per cent. solution of ordinary gelatine and the mixture applied hot.

According to M. M. Lumière Frères and Seyewtz the salt of cerium very quickly reduces the silver image in the negative without the inconvenience of the per-salts of iron. The sulphate of cerium may be had commercially and though in presence of an excess of water it precipitates, the addition of sulphuric acid prevents any such action.

Ceric sulphate with addition of a small quantity of sulphuric acid may be used as a reducer without causing any destruction of the film and its action is rapid.

The ease with which it dissolves in water, the permanence of solutions acidified with sulphuric acid, the rapidity with which a concentrated solution dissolves silver, its very regular action at all degrees of concentration; finally the fact that the solutions can be used till exhausted and can be kept indefinitely, render this new reducer very convenient in use. It has further the advantage of being suitable for reducing gelatine bromide prints without staining the whites.

The concentrated solution of ceric sulphate which is most suitable to be afterwards diluted as necessary, is a 10 per cent. solution to which is added about 4 c.c. of sulphuric acid for 100 c.c. of solution, so that it may be diluted without fear of precipitate. This addition of acid has, as stated above, no injurious action on the film, because it finally forms a salt with a slightly acid reaction.

The 10 per cent. solution acts very powerfully, but nevertheless does not attack the film irregularly, causing it to run when examined by transmitted light, as so frequently happens with potassium ferricyanide.

The rapidity of the action can be regulated as desired by diluting the liquid more or less. A solution at 5 per cent. will be useful if a rapid reducer is wanted, which will act more quickly upon the most opaque parts of the negative than upon the transparent parts.

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M. Traïllat (*Comptes Rendus*, January 26th), has sought to determine whether it is possible to transform the amorphous state of the silver forming the image of a negative into a laminated state, so as to produce the phenomenon of interference of light and thus produce colors.

In order to effect this purpose he endeavored to find some method by which the precipitate of amorphous silver in the film could be dissolved in the film itself and to reprecipitate the silver in a lamellar state.

Fluid reagents were found to dissolve the image and cause distortion, but with the use of vapors which dissolves the silver the support remains and the image retains its definite form. The vapor of nitric acid is employed. After a few minutes the image becomes thin and almost disappears. The negative is rendered quite transparent and the silver remains dissolved in a colloidal state.

The image is now reproduced in a condition of continuous laminae by precipitating the silver by sulphuretted hydrogen in form of gas in presence of aqueous vapor. The image is reproduced with localised brilliant metallic colors similar to the Lippman plates.

According to Herr Gaedeke the discoloration of the paper in the platinum prints occasioned by the failure to eliminate the iron salt from the fibre, may be bleached out by employing a bath,—220 grains of carbonate soda and 300 grains chloride of lime (chlorinetted lime), 8 ounces water.

BUSINESS NOTES

The season for floral photography is now at hand and to those who delight in this beautiful province of the art we would specially recommend for their superior qualities in rendering the delicate yellows of flowers, the Cramer Medium Isochromatic plate. It translates in a charming

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manner the peculiar translucency of the petals and makes the photographs, made with it perfect transcripts of nature's loveliness and not cold marble-like renditions.

It is not necessary to use a yellow screen with the Medium Isochromatic plate of Cramer unless the blue color in association with the yellow of flowers is very pale. The Isochromatic plate is also indispensable for perfect rendering of early Spring foliage which has a preponderance of yellow in its constitution and also for securing light fleecy clouds in the blue sky.

The celebrated Collinear lenses, manufactured by Voigtlaender & Son, may be fitted to all styles of long focus cameras as well as all styles of box cameras, cycle and regular folding cameras. These lenses are very rapid rectilinears and give excellent illumination and brilliant images, and besides they have the advantage of being convertible.

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The practical photographer will find the Glass Washing and Fixing Bath, made by the Appert Glass Co., of N. Y., not only a very convenient apparatus for fixing and washing all size plates from 4 x 5 up, but also a very durable and clean one, which cannot warp or rust and is not liable to become encrusted with deposits, being wholly unaffected by the hypo. The water circulates completely, being introduced at the bottom. It is made of the Appert Glass and is provided with rack rubber tubing, wire hook and funnel. It is just the apparatus for the tidy and clean photographer.

We have received from Folmer & Schwing Mfg. Co., N. Y., a copy of their annual catalogue of photographic apparatus and materials. Their commodities may be depended upon as they are of the highest grade of manufacture and perfect in every particular and supplied with all the recent improvements. Price list and illustrated catalogue on application.

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Still another Catalogue of photographic requisites ; but this Photographic Encyclopedia, as it is called, of Andrew J. Lloyd & Co., Boston, though devoting considerable bulk to the setting forth of the merits of the extensive line of things needed by the professional and amateur, is in addition a photographic *vade-mecum*, being interleaved with papers on photographic subjects written by prominent men in the profession and interspersed with numerous formulæ for developers, toning, printing, use of lenses, and valuable tables of reference. The Encyclopedia is similar to those excellent catalogues issued by English dealers and manufactures, and is worth considerably more than the twenty cents which is charged to defray expenses in getting together the instructive papers and other valuable information.

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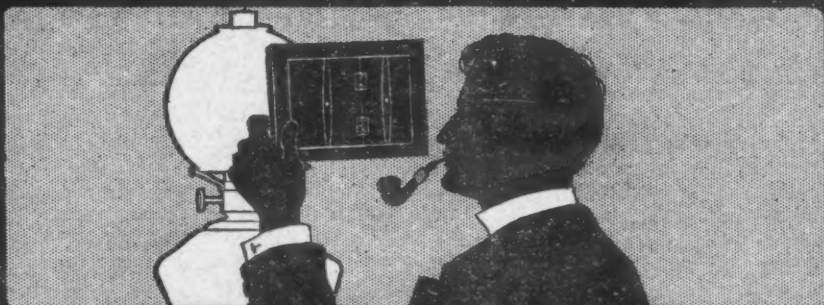
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